

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 17. (Canceled).

18. (Currently Amended) ~~The A brushless D.C. drive of claim 17, comprising:~~
a synchronous motor including a multiphase armature winding;
a switching device controllable by an electronic controller to commutate the
multiphase armature winding, and being connected upstream from the multiphase
armature winding; and
a device to generate a fail-silent response, and including a separating
arrangement to respond to a fault by separating connections between winding
phases of the multiphase armature winding;
wherein a control unit is operable to detect the fault and to activate the
separating arrangement; and
wherein the separating arrangement is operable to cause an irreversible separation of the connections between the winding phases of the multiphase armature winding.

19. (Previously Presented) The drive of claim 18, wherein the separating arrangement includes at least one pyrotechnic blasting capsule that is triggerable by the control unit.

20. (Previously Presented) The drive of claim 19, wherein the multiphase armature winding is in a star connection, and the at least one pyrotechnic blasting capsule is arranged at a neutral point so that it is capable of rupturing the neutral point.

21. (Previously Presented) The drive of claim 19, wherein the separating arrangement includes switching contacts that are prestressed in a direction of opening and holding elements, the opening and holding elements being operable to secure one of the switching contacts in a closed position, and the at least one

blasting capsule is arranged so that it is capable of at least one of destroying and releasing the opening and holding elements.

22. (Previously Presented) The drive of claim 21, wherein:
the multiphase armature winding is in a star connection and includes at least two winding phases;

the switching contacts include the opening and holding elements arranged between a neutral point and an end of a winding of the at least two winding phases;
and

the at least one pyrotechnic blasting capsule is a common blasting capsule for all of the opening and holding elements.

23. (Previously Presented) The drive of claim 21, wherein:
the multiphase armature winding is in a delta connection;
each of the switching contacts includes one of the opening and holding elements connected in series with each of the at least two winding phases; and
the at least one pyrotechnic blasting capsule includes a plurality of pyrotechnic blasting elements, one for each of the opening and holding elements.

24. (Currently Amended) ~~The A brushless D.C. drive of claim 17, comprising:~~
a synchronous motor including a multiphase armature winding;
a switching device controllable by an electronic controller to commutate the multiphase armature winding, and being connected upstream from the multiphase armature winding; and

a device to generate a fail-silent response, and including a separating arrangement to respond to a fault by separating connections between winding phases of the multiphase armature winding;

wherein a control unit is operable to detect the fault and to activate the separating arrangement; and

wherein the separating arrangement includes at least one fusible cutout that is controllable by the control unit.

Claim 25. (Canceled).

26. (Currently Amended) The drive of claim 25 18, wherein the separating arrangement includes electric switching contacts arranged in the winding phases that are controllable at least one of electronically and mechanically.

27. (Previously Presented) The drive of claim 24, wherein the multiphase armature winding is in a star connection, and the separating arrangement is arranged at a neutral point.

28. (Previously Presented) The drive of claim 24, wherein the multiphase armature winding is in a delta connection, and the separating arrangement is connected in series with each of the winding phases.

29. (Currently Amended) ~~The A brushless D.C. drive of claim 17, comprising:~~
a synchronous motor including a multiphase armature winding;

a switching device controllable by an electronic controller to commutate the multiphase armature winding, and being connected upstream from the multiphase armature winding; and

a device to generate a fail-silent response, and including a separating arrangement to respond to a fault by separating connections between winding phases of the multiphase armature winding;

wherein a control unit is operable to detect the fault and to activate the separating arrangement; and

wherein:

the switching device includes semiconductor switches in a bridge circuit;

the control unit includes measurement shunts arranged in each connecting line between the switching device and the multiphase armature winding; and

the control unit is operable to measure electric current flowing through the measurement shunts in simultaneous blocking phases of all the semiconductor switches, and to deliver an activation signal to the separation arrangement if a current value in at least one of the measurement shunts differs significantly from zero.

30. (Currently Amended) ~~The A brushless D.C. drive of claim 17, comprising:~~
a synchronous motor including a multiphase armature winding;

a switching device controllable by an electronic controller to commutate the multiphase armature winding, and being connected upstream from the multiphase armature winding; and

a device to generate a fail-silent response, and including a separating arrangement to respond to a fault by separating connections between winding phases of the multiphase armature winding;

wherein a control unit is operable to detect the fault and to activate the separating arrangement; and

wherein:

the control unit includes measurement shunts, each of which connects one of the winding phases to a neutral point; and

the control unit is operable to continuously measure an amount and a phase of shunt currents, add them as a vector sum, and deliver an activation signal to the separation arrangement if the vector sum significantly deviates from zero.

31. (Previously Presented) The drive of claim 21, wherein:

the multiphase armature winding is in a delta connection;

each of the switching contacts includes one of the opening and holding elements and is connected in series with each of the winding phases; and

the at least one blasting capsule includes a common blasting capsule for all of the opening and holding elements.